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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,601	06/25/2003	Normand Desy	133840	1469
28080	7590	04/22/2005	EXAMINER	
CRAIG WILSON 2570 MATHESON BLVD. EAST SUITE 211 MISSISSAUGA, ON L4W 4Z3 CANADA			VERDIER, CHRISTOPHER M	
			ART UNIT	PAPER NUMBER
			3745	

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

②

<b>Office Action Summary</b>	Application No. 10/602,601	Applicant(s) DESY ET AL.	
	Examiner Christopher Verdier	Art Unit 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 July 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4 and 6-14 is/are allowed.
- 6) ☒ Claim(s) 5 and 19 is/are rejected.
- 7) ☒ Claim(s) 15-18 and 20-28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6-25-03</u> . | 6) <input type="checkbox"/> Other: _____  |

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Receipt and entry of Applicant's Preliminary Amendment dated July 29, 2004 is acknowledged.

***Information Disclosure Statement***

The information disclosure statement filed June 25, 2003 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of Soviet Union Patent 1,263,902 which is not in the English language. The information referred to therein has not been considered.

***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the outlet ports varying in at least one of size, number, and positioning around the gas distribution manifold (claims 7 and 21), and the outlet ports varying in at least one of size and positioning around the gas distribution manifold (claims 9 and 23), must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing

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should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "36". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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The drawings are objected to because in figure 1, reference numeral 30 incorrectly points to part of the turbine runner, and not to the head cover, as mentioned in paragraph 22, line 8 of the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

The disclosure is objected to because of the following informalities: Appropriate correction is required.

In paragraph 25, lines 5-7 are non-idiomatic.

In paragraph 30, line 2, "2" should be changed to -- 3 --.

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The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

Claims 5 and 19, which recite that at least one shroud is connected to the gas distribution manifold covering the gas outlet ports, has no antecedent basis in the specification. Note that paragraph 28, lines 1-3 state that each outlet port has a shroud covering 60, but there is no antecedent basis for plural shrouds covering plural gas outlet ports.

***Examiner's Suggestions to Claim Language***

The following are suggestions to improve the clarity and precision of the claims:

In claim 10, line 2, -- the -- may be inserted after "controlling".

In claim 24, line 2, -- the -- may be inserted after "controlling".

***Claim Objections***

Claims 15-28 are objected to because of the following informalities: Appropriate correction is required.

In claim 15, line 2, "passage" should be changed to -- passageway --.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 5 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 5 and 19 recite that at least one shroud is connected to the gas distribution manifold covering the gas outlet ports. This is inaccurate, because as seen in figures 1-3, each shroud 60 covers only a single gas outlet port 56.

### ***Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rheingans is cited to show a hydraulic turbine having a draft tube 14 with a gas distribution manifold 32 located outside of the draft tube.

Hullman is cited to show a pump-turbine having a tube 6 with a water distribution manifold 17 located outside of the tube.

### ***Allowable Subject Matter***

Claims 1-4 and 6-14 are allowed. Claims 15-18 and 20-28 contain allowable subject matter; applicant should correct the informalities therein.

The following is a statement of reasons for the indication of allowable subject matter: the claims of the instant application are directed toward an unobvious improvement over the invention patented in U.S. Patent 2,300,748. In U.S. Patent 2,300,748, the gas distribution manifold 32 is located around the outer wall of the draft tube 14, and does not extend at least

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substantially around the first inside wall of the draft tube. The improvement comprises the gas distribution manifold 32 being mounted to and extending at least substantially around the first inside wall of the draft tube.

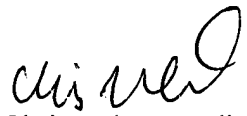
U.S. Patent 5,941,682 shows a hydraulic turbine having a gas distribution manifold 70 that is mounted to and extends at least substantially around a first inside wall of a draft tube 72, but does not disclose plural gas outlet ports distributed around the gas distribution manifold. Rather, a substantially continuous slot 50 is provided. Attempting to form slot 50 as plural gas outlet ports would involve hindsight and destroy the operability of the adjustable slot.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Verdier whose telephone number is (571) 272-4824. The examiner can normally be reached on Monday-Friday from 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward K. Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C.V.  
April 18, 2005

  
Christopher Verdier  
Primary Examiner  
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